

ABSTRACT OF THE DISCLOSURE

[0038] Apparatus for supporting a substrate such as a semiconductor wafer in a process chamber to improve power coupling through the substrate. The apparatus contains a pedestal assembly and a pedestal cover positioned over the top surface of and circumscribing the pedestal assembly for electrically isolating the pedestal assembly. The pedestal cover reduces conductive film growth in the wafer process region. As such, RF wafer biasing power from the pedestal assembly remains coupled through the substrate during processing.